

Mineral Resource

Aggregate Mining Bill

In May of this year Senate Bill 1344 (HB2655), the Aggregate Mining Community Notice Act, was signed into law. This bill is a revision of §11-830 that exempted mining from county zoning ordinances. The Arizona Rock Products Association believes the bill will provide the industry with safeguards that will ensure the continuation of mining in the State while also providing the community with notification of mining activities so residents will have proper input and notification of changes in their community. The provisions of the act are as follows:

- Requires new or major modifications to existing aggregate mining operations within an aggregate mining operations zoning district to file a community notice with the State Mine Inspector and notify residential property owners within one-half mile of the operation. Establishes a fee to be paid by the mining operation.
- Establishes a community notice process for the siting or major modification of an aggregate mining operation located within an aggregate mining

operations zoning district. The process is coordinated by the State Mine Inspector, who is authorized to enforce the provisions outlined in an approved community notice and zoning district regulations.

- Requires, upon petition by at least 100 residents, counties with a population of more than two million persons to establish an aggregate mining zoning district. Clarifies that any county board of supervisors may establish one or more aggregate mining zoning districts.
- Limits the location of aggregate mining zoning districts to areas inventoried and mapped as areas of known reserves or in areas with existing aggregate mining operations.
- Limits the type of zoning district standards that may be adopted to those that are not addressed by federal, state or local regulation or a governmental contractual obligation.
- Expands the role of the aggregate mining operations recommendation committee to include medi-

All Aboard!

Can you tell which figures are painted and which are Sue Celestian, Museum Curator, and Doug Duffy, Shop Manager? Clue: Sue and Doug are without hardhats. They are dwarfed by the Komatsu 930E load hauler newly painted on the back of the Department's building. Road Machinery Co. funded the 70-foot by 40-foot mural that brings the scale and feel of mining to downtown Phoenix. The truck is depicted at its actual height of 24 feet. The 930E, used in Arizona copper mines, is one of the largest truck used in mining, with 2,700 horsepower and a payload of 320 tons.



ating disputes between members of the public and aggregate mining operators and hearing written complaints forwarded by the Mine Inspector. Requires the committee to forward unresolved disputes to the Mine Inspector for further action

- No major modification of an approved community notice can be undertaken until it is approved by the Mine Inspector. Major modifications are defined to include:
 1. a more than 20 acre increase over the acreage in the community notice;
 2. a new type of mining never before conducted on-site; or
 3. certain other changes to the community notice.
- Requires joint approval by the county Board of Supervisors and the State Mine Inspector (without modification) in order for zoning district regulations to be effective.
- Prohibits aggregate mining in an aggregate mining operation zoning district unless the operation obtains an approved community notice. Prohibits a major modification of a community notice until a major modification application is approved by the Mine Inspector.

To view the revised law visit:

www.azleg.state.az.us/legtext/45leg/2r/bills/sb1344s.htm

Turquoise Madness

Gem buyers from around the world are looking to Arizona to supply an urgent demand for turquoise. The Arizona gemstone has become the latest fashion craze as film and rock stars began wearing the stone this Spring and suddenly turned it into the trendiest item since pet rocks. Sophia Loren and Britney Spears, among others, have fueled the turquoise frenzy as they have been seen wearing a variety of turquoise jewelry. Although some other countries produce turquoise, it is not Arizona's official gemstone for nothing. Turquoise is an ore of copper and Arizona is the Copper State, producing 65 percent of the Nation's copper.

Turquoise was mined in this area by Native Americans long before the first Spanish explorers and it has continued to be a local favorite, but it has not been in high fashion vogue since the 1970s. "I can sell absolutely all Arizona turquoise I can get," says Jim Vacek of 49er Minerals, exporter of Arizona minerals. "European and Asian buyers can't get enough."

Currently turquoise is mined at the Sleeping Beauty mine near Globe by Sleeping Beauty Turquoise and a small amount at Morenci by Southwest Minerals. There is also some production by independent prospectors and collectors.

If you drove Highway 89 or 160 in northeastern Arizona this summer you probably did not see the familiar and popular "Indian Jewelry" signs on roadside tables. They did not have to go to buyers this summer; buyers beat a path to their doors.

Spare Tire

This 10,000 pound Caterpillar 797 tire is being eased into its prepared concrete base in front of the Department of Mines and Mineral Museum. The tire is a Michelin E4R and is 12 feet 3 inches in diameter and 50 inches wide. It was retired from use at the Sierrita mine south of Tucson.

Purcell's Western States Tire and Phelps Dodge Sierrita donated the tire and APS donated the equipment and operators to move it, assisted by Museum volunteers who also prepared the base.

The tire makes for dramatic viewing on Washington approaching the State Capitol.



Museum News

Teacher Workshops

Arizona teachers have a real need for some instruction in the identification of minerals and rocks. Introductions to the physical tests and general properties of earth materials are included in the curriculum of Arizona's schools throughout the elementary grades. However, most teachers know little more than that information which is provided them in the prepared kits they rely on for their classroom activities.

So, in June for the first time in a long time, the Museum offered 2 different free workshops to teachers. The instructor was Stanley J. Celestian, a museum volunteer and professor of geology, earth science and astronomy at Glendale Community College. Two Basic Mineral Identification and one Basic Rock Identification three-hour sessions were presented to a total of 27 teachers, some of who came from as far away as Kingman! Each attendee was given a packet, which included appropriate written materials and heavily notated tutorial Power Point presentations (written by Stan). Half of the time was spent hands-on, studying and identifying strange and mysterious minerals and rocks.

Lapidary classes

Doug Duffy, lapidary shop manager, has been busy all year offering classes in lapidary (cabochon making), lost wax casting, silversmithing and advanced silversmithing. The latter was added this year and introduces workers of silver to such techniques as overlaying, broom casting, chain making, twisted wire bracelet assembly, forged bracelet, texturing/polishing/cleaning techniques, and reticulation. The assistance of volunteers John Winters, Gary Rodman and Dick McPherson has been invaluable in increasing the individualized attention necessary to students learning to turn their rockhounding finds into works of art.

Students provide most of their own tools and materials, plus pay a small fee. Upon completing a class, the student is certified to utilize the tools of the lapidary shop on a continuing basis. Currently, there is a long waiting list for the classes.

The shop has also undergone some remodeling in recent months. Saws and polishers have been moved around to accommodate the sphere maker and casting furnace, grinders have been set so that visitors can view craftspeople shaping their stones, wax working pens have been made and stations established, and most recently a fire-proof table top was added to create a soldering station. And to expand the creative possibilities, the shop has also purchased a rolling mill to create designs on and/or flatten wire.

New Exhibits

Take a look around the Museum and see the new exhibits. Three Bisbee cases have been consolidated into one. New Ray Mine and Morenci Mine displays have been started. Coming soon will be a Bagdad Mine and updated New Cornelia Mine cases.

Case 50 has been transformed by tour guide/volunteer, Shirley Cote. It showcases and illustrates the six crystal systems. By using more color than usual, she has been able to visually subdivide the display elements and prevent confusion for the viewer.

And as always, keep stopping by the New Acquisitions case to see what has been donated lately.



Do you need this information in an alternative format? Please call the Department at 602-255-3795.

United Metro Sold

Rinker Materials Corporation has acquired Kiewit Materials Company, owner of Arizona's United Metro Material, Inc. This transaction is in keeping with the consolidation trend of the last few years in the aggregate industry. Rinker is one of the largest US producers of construction materials.

The company acquired all of Kiewit Materials operations that include 44 aggregate facilities in the West and Southwest. The purchase price was \$540 million net of projected surplus cash at closing.

United Metro Materials' operations will continue to use that name.

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